Applicant: Robert H. V

Serial No.: 09/811,342 Filed : March 16, 2001

Page

y Docket No.: 10964-037002 Plug Power Docket No.: 664

REMARKS

Claims 21 to 45 are pending in the application, of which claims 21, 30, 36, 42 and 44 are the independent claims. Favorable reconsideration and further examination are respectfully requested.

Initially, Applicant thanks the Examiner for the indication that claim 27 contains allowable subject matter and would be in condition for allowance if rewritten in independent form to include all of the limitations of its base claims. Rather than rewriting claim 27, Applicant presents new claim 42, which includes all of the limitations of claim 27. Claim 42, and its dependent claim 43, are thus believed to be allowable.

New claims 44 and 45 are also believed to be allowable, since they contain features, noted on pages 4 and 5 of the Office Action, that were not found in the art.

In the Office Action, claims 30 to 33 and 36 to 39 were rejected under 35 U.S.C. §102(e) over U.S. Patent No. 4,630,220 (Peckinpaugh); claims 21 to 26, 29, 35 and 41 were rejected under §103 over U.S. Patent No. 5,754,253 (Lee) and Peckinpaugh; claim 28 was rejected under §103 over Lee in view of U.S. Patent No. 6,172,889 (Eguchi); and claims 34 and 40 were rejected under §103 over Peckinpaugh in view of Eguchi. As shown above, Applicant has amended the claims to define the invention with greater clarity. In view of these clarifications, withdrawal of the art rejections is requested.

Amended independent claim 21 defines a system to control power supplied to a utility network. The system includes a detector to detect a characteristic of power on a grid line of the utility network, an accelerator to provide an accelerating response function in

Applicant: Robert H. V Serial No.: 09/811,342

Serial No.: 09/811,342 Filed: March 16, 2001

Page : 10

Attered Docket No.: 10964-037002 Plug Power Docket No.: 664

response to a change in the characteristic, and circuitry to control the power supplied to the utility network based on the accelerating response function. The circuitry comprises a power converter that operates in accordance with the accelerating response function.

The applied art is not understood to disclose or to suggest the foregoing features of claim 21, particularly with respect to providing an accelerating response function in response to a change in the characteristic, and a power converter that operates in accordance with the accelerating function to control power to a utility network.

In this regard, Peckinpaugh was cited for its alleged disclosure of controlling power supplied to a utility network in accordance with a trend in voltage on that network.

Peckinpaugh, however, does not disclose or suggest use of an accelerator. Lee was cited to remedy this deficiency of Peckinpaugh. In this regard, Lee describes use of an accelerator in the context of a sub-screen video signal. In particular, Lee describes using the accelerator to produce automatic gain control data and a corresponding automatic gain control voltage ACG1 based on a frequency detected in a sub-screen. The resulting data is used to control viewing of a sub-screen in an acceleration mode. Nowhere, however, does Lee describe providing an accelerating response function and using that function to control a supply of power. Accordingly, even if Lee were combined with Peckinpaugh in the manner described in the Office Action, the resulting hypothetical combination would still fail to disclose or to suggest the foregoing features of claim 1.

Moreover, Applicant submits that there is no motivation to combine Lee with Peckinpaugh in the manner suggested in the Office Action (despite what is said on page 2 of the Office Action). That is, Lee is dealing with low-voltage consumer microelectronics Applicant: Robert H.

Serial No.: 09/811,342

Filed

: March 16, 2001

Page

: 11

ey Docket No.: 10964-037002

Plug Power Docket No.: 664

signals, whereas Peckinpaugh is dealing with high-voltage power grid signals. It is well known that circuit elements used to process high-voltage power signals may not be readily interchanged with circuit elements used in microelectronics. As such, Applicant submits that neither Peckinpaugh nor Lee provides motivation for the suggested combination.

In view of the foregoing amendments and remarks, Applicant submits that claim 21 is in condition for allowance.

Amended independent claim 30 defines method of controlling power supplied to a utility network. The method includes detecting a trend in voltage on the utility network, providing an accelerating response function in response to the trend, and controlling a power converter, which supplies the power to the utility network, in accordance with the accelerating response function.

As described above, neither Peckinpaugh nor Lee provides an accelerating response function and controls a power converter in accordance with that function. Accordingly, claim 30 is believed to be in condition for allowance.

Amended independent claim 36 is an apparatus claim that roughly corresponds to method claim 30. Claim 36 is therefore also believed to be in condition for allowance.

In view of the foregoing amendments and remarks, the entire application is believed to be in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

Applicant's attorney can be reached at the address shown above. Telephone calls regarding this application should be directed to 617-521-7896.